WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

UNITED STATES DEPARTMENT of AGRICULTURE···SOIL CONSERVATION SERVICE
and
COLORADO AGRICULTURAL EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

Data included in this report were obtained by the agencies named above in cooperation with the Bureau of Reclamation, U.S. Forest Service, National Park Service, Corps of Engineers and other Federal, State, and private organizations.

AS OF
MAY 1, 1967

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season as they affect runoff will add to be an effective average. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1400 snow courses in Western United States and in the Columbia Basin in British Columbia. In the near future, it is anticipated that automatic snow water equivalent sensing devices along with radio telemetry will provide a continuous record of snow water equivalent at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data or reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

Listed below are water supply outlook reports based on Federal-State-Private Cooperative snow surveys. Those published by the Soil Conservation Service may be obtained from Soil Conservation Service, Room 507, Federal Building, 701 N. W. Glisan, Portland, Oregon 97209.

PUBLISHED BY SOIL CONSERVATION SERVICE

D. A. WILLIAMS, Administrator

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 507, 701 N. W. Glisan, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	P. O. Box "F", Palmer, Alaska 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85205
Colorado (N. Mex.)	12417 Federal Building, Denver, Colorado 80202
Idaho	P. O. Box 38, Boise, Idaho 83701
Montana	P. O. Box 855, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4001 Federal Building, Salt Lake City, Utah 84111
Washington	840 Bon Marche Bldg., Spokane, Washington 99206
Wyoming	P. O. Box 340, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

FEDERAL-STATE COOPERATIVE
SNOW SURVEYS AND WATER SUPPLY FORECASTS
for
COLORADO RIVER, PLATTE RIVER
ARKANSAS RIVER AND RIO GRANDE DRAINAGE BASINS
issued
May 1, 1967

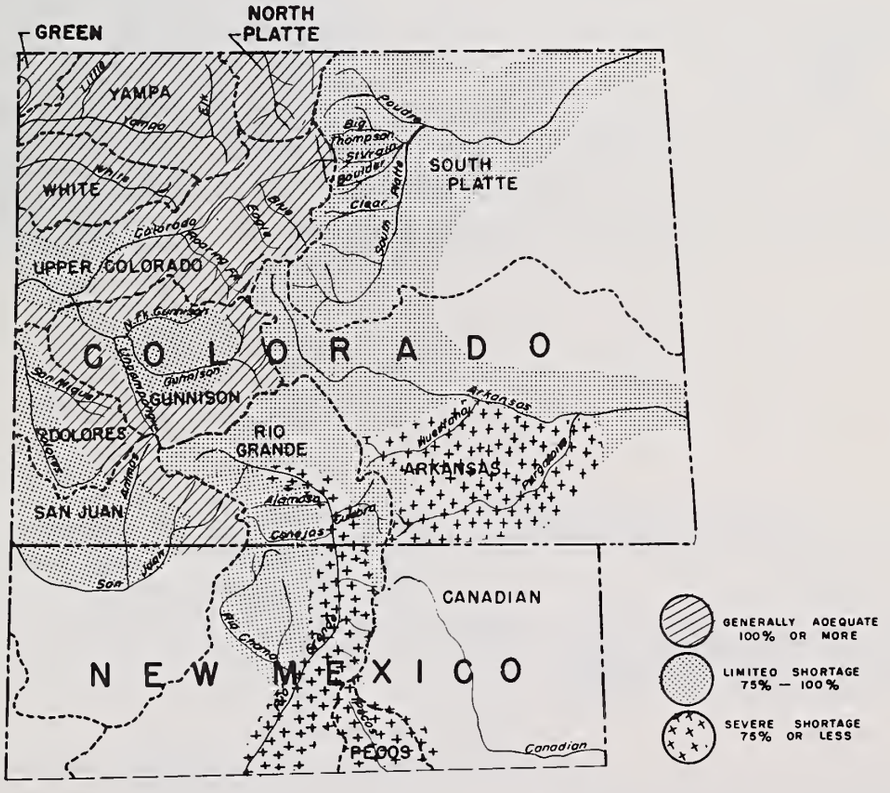
Report Prepared By

Jack N. Washichek, Snow Survey Supervisor
and
Donald W. McAndrew, Assistant Snow Survey Supervisor
Fort Collins, Colorado

United States Department of Agriculture
Soil Conservation Service
and
Colorado Agricultural Experiment Station
Fort Collins, Colorado

State Engineer of Colorado
Denver, Colorado
and
State Engineer of New Mexico
Santa Fe, New Mexico

WATER SUPPLY OUTLOOK



THE MAP ON THIS PAGE INDICATES THE MOST PROBABLE WATER SUPPLY AS OF THE DATE OF THIS REPORT. ESTIMATES ASSUME AVERAGE CONDITIONS OF SNOW FALL, PRECIPITATION AND OTHER FACTORS FROM THIS DATE TO THE END OF THE FORECAST PERIOD. AS THE SEASON PROGRESSES ACCURACY OF ESTIMATES IMPROVE. IN ADDITION TO EXPECTED STREAMFLOW, RESERVOIR STORAGE, SOIL MOISTURE IN IRRIGATED AREAS, AND OTHER FACTORS ARE CONSIDERED IN ESTIMATING WATER SUPPLY. ESTIMATES APPLY TO IRRIGATED AREAS ALONG THE MAIN STREAMS AND MAY NOT INDICATE CONDITIONS ON SMALL TRIBUTARIES.

WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

as of

May 1, 1967

COLORADO - All of Colorado's streams are expected to flow less than normal this year, however, the Colorado mainstem and streams to the north should not experience any major shortage. Despite the late spring snow storms, the Colorado snow pack remains below normal.

The South Platte and Arkansas Basins on the east slope will have considerably less than normal streamflow, but have good reservoir storage for supplemental supplies. The Arkansas Basin has 160% of average carryover.

The Rio Grande Basin streams should flow about 65% of normal and storage is below normal. Streams in San Juan Basin should flow 60% of the 15 year average.

Soils are in fair condition throughout most of the state.

Conserve your water!

NEW MEXICO-Water shortages will exist over most of New Mexico this summer unless spring and summer rainfall is much above normal. Most of the snow in New Mexico is gone. In the headwater areas of the Rio Grande and San Juan Drainages the high elevation snow pack is still good, but medium to low snow has melted.

Reservoir carry-over storage is less than normal, but will be of some help during the summer. Valley soils throughout the state are generally dry.

Forecasts are far less than one-half the normal flows in all streams in New Mexico.

Conservation of water should be the by-word this summer.

TABLE OF CONTENTS

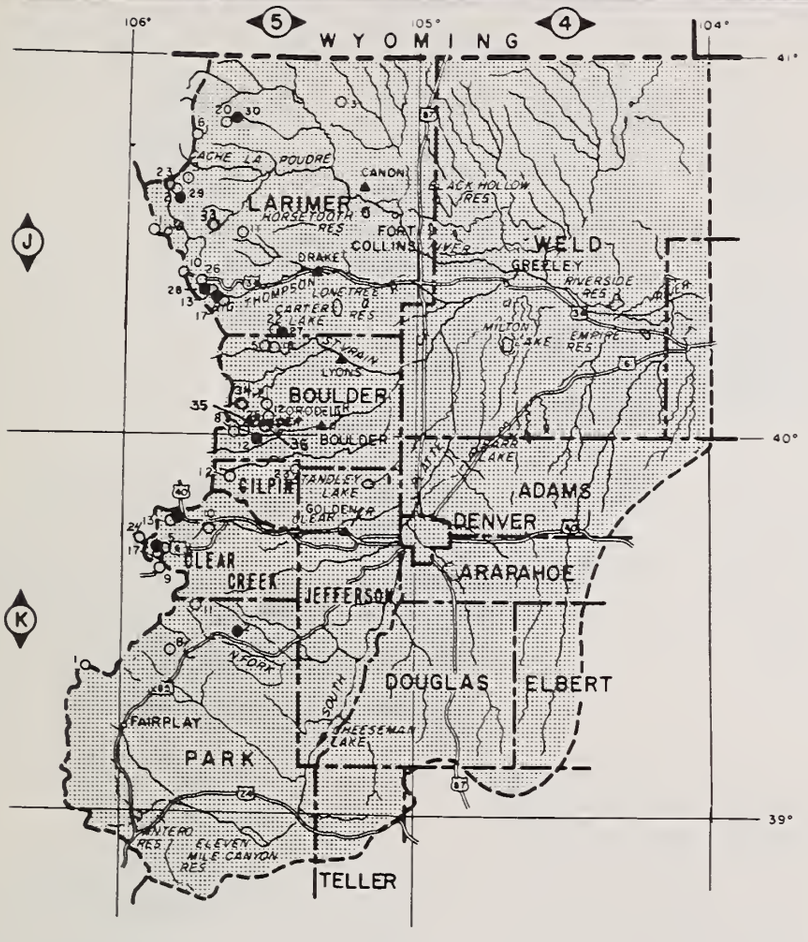
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE

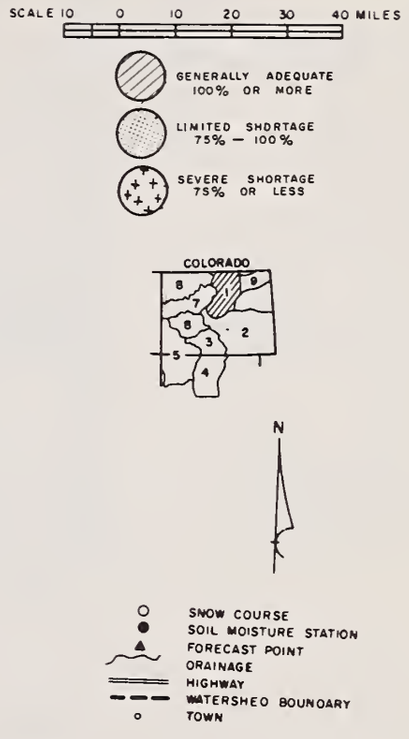
SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of

May 1, 1967

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO





The snow pack in the mountain watersheds of the South Platte River and its tributaries remains below normal. Even with the big storm of April 13th, the snow pack remains at only 67% of average over the entire basin. There are a few isolated areas in the basin that have a near normal snow pack. These are mostly in the very high elevations.

The water held in the reservoirs throughout the basin remains similar to last month at 107% of average. This water will be an excellent supplement this summer. Following the good rains in the area during this last month most of the irrigated areas are reporting good soil moisture conditions. This situation will help the below normal streamflow as it will lessen the demands on the early flows.

Mountain soil moisture is slightly below normal for this time of year. Some of the snow water will be used to wet up the soil mantle before the spring runoff starts.

Streamflow forecasts range from a high of 90% of average on Clear Creek to a low of 73% on the Cache La Poudre. The Big Thompson, Boulder Creek and Saint Vrain Rivers will flow between 77 to 85% this year. The mainstem of the South Platte will probably flow less than 70% this summer.

Issued By: Soil Conservation Service

F. A. Mark, State Conservationist,
Colorado

E. A. Nicholson, Area Conservationist,
Littleton, Colorado

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

SNOW — CURRENT INFORMATION — PAST RECORD

Snow Course		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches) Last Year	Water Content (Inches) Avg. 48-62
South Platte River & Tributaries						
Baltimore		4/27	0	0	0	- -
Berthoud Falls		4/27	19	7.2	8.4	13.8*
Big South		4/29	3	0.4	0	0.8
Boulder Falls		4/29	22	9.2	5.0	13.2*
Cameron Pass		4/26	82	33.9	21.9	28.1
Chambers Lake		4/30	14	6.1	0	5.5
Como		4/26	6	2.1		- -
Copeland Lake		4/28	0	0.0	0	2.3*
Deadman Hill		4/27	48	17.1	13.0	18.1
Deer Ridge		4/27	1	0.5	0	3.5*
Empire		4/27	22	8.4	4.2	7.1*
Geneva Park		4/26	5	2.1	0.5	1.9*
Grizzly Peak	(B)	4/27	49	18.4	10.7	21.1
Hidden Valley		4/27	29	10.6	6.9	13.6
Hoosier Pass		4/26	33	11.6	6.0	12.9
Horseshoe		4/26	18	6.0		- -
Hour Glass Lake		4/27	12	4.1	1.4	7.5
Jefferson Creek		4/27	17	5.8	1.9	8.0*
Lake Irene	(B)	4/26	61	21.8	12.0	24.7
Long's Peak		4/29	33	12.1	6.5	13.4*
Lost Lake		4/30	32	7.7	1.9	10.2*
Loveland Lift No. 1		4/28	76	27.5	15.1	- -
Loveland Pass		4/28	33	13.7	4.9	16.4
Mosquito		4/26	3	1.1		- -
Pine Creek		4/27	0	0.0	0	- -
Red Feather					0.7	4.9*
Two Mile		4/27	53	17.3	9.8	17.8*
Trout Creek		4/28	0	0.0		- -
University Camp		4/29	35	14.1	8.2	24.9
Ward		4/27	11	4.1	0.4	6.0*
Wild Basin		4/27	24	7.6	5.1	14.8

SOIL MOISTURE

Station	Date of Survey	Capacity (Inches)	This Year	Last Year	Avg. All Data
Alpine Camp	4/27	6.9	3.5	4.1	4.3
Beaver Dam	4/27	7.3	4.8	5.2	4.7
Clear Creek	4/28	9.5	5.8	6.4	5.9
Feather	4/28	10.1	6.5	9.4	8.1
Guard Station	4/29	6.9	4.9	4.6	4.7
Hoop Creek	4/26	4.9	3.5	3.5	2.9
Hoosier Pass	4/26	7.8	4.8	6.3	5.9
Kenosha Pass	4/27	4.4	4.0	3.3	3.7
Laramie Road	4/30	12.4	8.1	9.1	9.0
Two Mile	4/27	9.1	4.3	5.5	5.6

ALL PROFILES 4 FEET DEEP

RESERVOIR STORAGE (1,000 Acre-Feet)

Reservoir	Usable Capacity	This Year	Last Year	15 Year Average 1948-62
Antero	33.0	14.5	15.9	13.4
Barr Lake	32.2	15.7	28.3	24.7
Black Hollow	8.0	3.3	4.1	3.3
Boyd Lake	58.0	28.5	40.6	20.8
Cache La Poudre	9.5	8.3	9.0	7.7
Carter Lake	108.9	95.7	107.3	79.0
Chambers Lake	8.8	3.2	6.7	2.8
Cheeseman	79.0	31.8	77.2	54.3
Cobb Lake	34.3	0	7.3	9.2
Eleven Mile	81.9	90.9	92.3	74.6
Fossil Creek	11.6	8.0	10.1	7.1
Gross	43.1	19.0	24.2	- -
Halligan	6.4	6.4	6.4	3.9
Horsetooth	143.5	116.8	120.3	85.6
Lake Loveland	13.6	4.1	8.3	7.4
Lone Tree	9.2	5.4	8.3	7.9
Mariano	5.4	5.3	5.6	3.2
Marshall	10.3	2.1	7.4	4.4
Marston	18.9	15.9	15.3	15.2
Milton	24.4	6.9	18.4	12.5
Standly	18.5	9.8	20.6	12.6
Terry Lake	8.2	4.3	5.9	5.2
Union	12.7	6.8	12.7	8.2
Windsor	18.6	6.3	13.1	11.4

MEASURED FIRST OF MONTH

STREAMFLOW FORECAST (1,000 Acre-Feet)

Stream and Station	Forecast Period April - Sept.	This Year % of Avg.	Avg. 1948-1962
Big Thompson at Drake (2)	85	77	110
Boulder at Orodell	46	85	54
Cache La Poudre at Canon Mouth (1)	180	73	246
Clear Creek at Golden (3)	120	90	134
Saint Vrain at Lyons	65	81	80

(1) Observed flow minus diversions from Michigan, Colorado and Laramie Rivers, plus diversions for irrigation and municipal use above station.
(2) Observed flow plus by-pass to power plants.
(3) Observed flow minus diversions through Jones Pass.

NOTE: * - 1948-62 (adjusted average)
NS - NO SURVEY
(A) - AIR OBSERVED
(B) - ON ADJACENT DRAINAGE

This Report Prepared by Jack N. Washichek and Donald W. McAndrew, Soil Conservation Service, Colorado State University, Fort Collins, Colo.

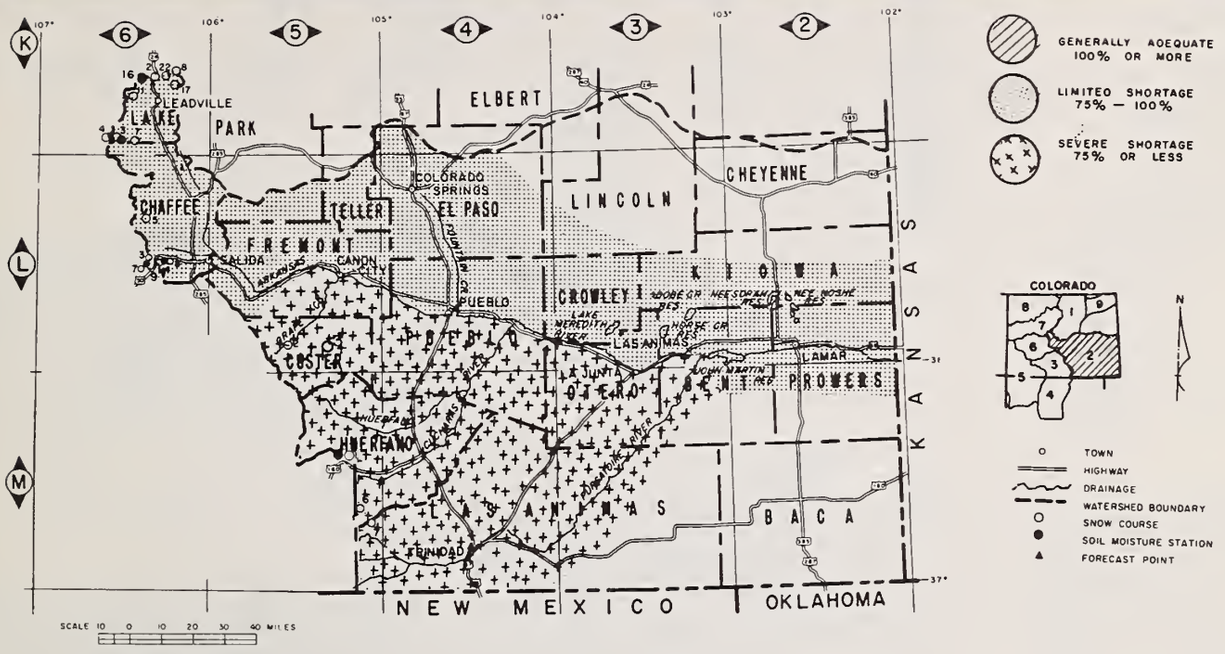
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE

ARKANSAS RIVER WATERSHED IN COLORADO

as of

May 1, 1967

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



The mountain snow pack on the Arkansas River Drainage is only 57% of average. However, the snow ranges from exactly normal in the Fremont Pass area to much below normal in the southern mountains. The snow courses located in the headwaters area of the Purgatoire and Cucharas Drainages are completely void of snow.

The soil moisture conditions in the mountains is better than average and similar to last year. Low elevation snow melt probably accounts for this condition. Soil moisture in the irrigated areas however, is reported to be only poor to fair. As of this writing the streamflow is below normal in the Arkansas River and its tributaries.

Water held in storage is still the only bright spot in the water outlook for the Arkansas Valley. Currently storage is 160% of average. There is nearly 300,000 acre-feet of water stored in the major reservoirs in the Arkansas River Watershed, however, nearly 140,000 acre-feet of this is in John Martin. This reservoir storage will be an excellent supplement for the deficient streamflow this season.

Streamflow forecasts range from a low of 38% of average on the Purgatoire to 65% of normal for the Arkansas at Salida. The streams in the wet mountain valley area will flow only half of normal this year. Streamflow on the Huerfano, Cucharas and Purgatoire Rivers will be about 40% of average this year.

Issued By: Soil Conservation Service

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Colorado

Will D. McCorkle, Area Conservationist,
La Junta, Colorado

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

SNOW

Snow Course	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches) Last Year	Water Content (Inches) Avg. 48-62
Arkansas River					
Bigelow Divide	4/28	0	0	0	- -
Bourbon	4/27	0	0	0	2.9*
Cooper Hill	4/26	43	12.6	6.8	- -
Cucharas Pass	4/28	0	0	1.6	- -
East Fork	4/26	16	5.2	2.0	13.4
Four Mile Park	4/28	0	0	0	1.0
Fremont Pass	4/26	57	19.5	10.3	19.5
Garfield	4/28	3	1.5	3.1	- -
LaVeta Pass (B)	4/28	0	0	0	1.7
Monarch Pass	4/28	14	6.8	9.3	18.4
St. Elmo (Air)	4/27	19	6.7	5.6	11.8
Tennessee Pass	4/28	8	2.7	5.0	8.5
Tomichi	4/28	6	2.2	5.5	- -
Twin Lakes Tunnel	4/28	24	8.8	4.0	9.1
Westcliffe	4/28	0	0	0	1.1

SOIL MOISTURE

Station	Date of Survey	Capacity (Inches)	This Year	Last Year	Avg. All Data
Garfield	4/26	6.7	6.1	6.3	4.3
King	4/28	3.3	3.0	3.0	2.1
LaVeta Pass	4/28	11.9	11.7	11.9	11.8
Leadville	4/26	7.8	5.7	5.7	4.8
Twin Lakes Tunnel	4/26	4.5	2.9	4.2	3.1

ALL PROFILES 4 FEET DEEP

RESERVOIR STORAGE (1,000 Acre-Feet)

Reservoir	Usable Capacity	This Year	Last Year	15 Year Average 1948-62
Adobe Creek	61.6	21.5	54.4	13.0
Clear Creek	11.4	6.8	11.2	4.7
Cucharas	40.0	0.1	0	5.3
Great Plains	150.0	71.8	123.3	44.4
Horse Creek	26.9	5.7	21.0	5.6
John Martin	366.6	136.9	352.5	64.6
Meredith	41.9	4.6	24.5	10.4
Model	15.0	•		2.2
Sugar Loaf	17.4	8.7	11.3	6.8
Twin Lakes	57.9	18.3	41.0	17.2

MEASURED FIRST OF MONTH

STREAMFLOW FORECAST (1,000 Acre-Feet)

Stream and Station	Forecast Period April - Sept.	This Year % of Avg.	Avg. 1948-1962
Arkansas at Pueblo (4)	194	60	323
Arkansas at Salida (4)	225	65	345
Cucharas nr LaVeta	6	43	14
Purgatoire at Trinidad	17	38	45

(4) Observed flow plus change in Clear Creek, Twin Lakes, and Sugar Loaf Reservoirs minus diversions through Busk-Ivanhoe and Twin Lake Tunnels and Ewing, Fremont Pass, Wurtz and Columbine Ditches.

NOTE: * - 1948-62 (adjusted averages)
NS - NO SURVEY
(A) - AIR OBSERVED
(B) - ON ADJACENT DRAINAGE

This Report Prepared by Jack N. Washichek and Donald W. McAndrew, Soil Conservation Service, Colorado State University, Fort Collins, Colo.

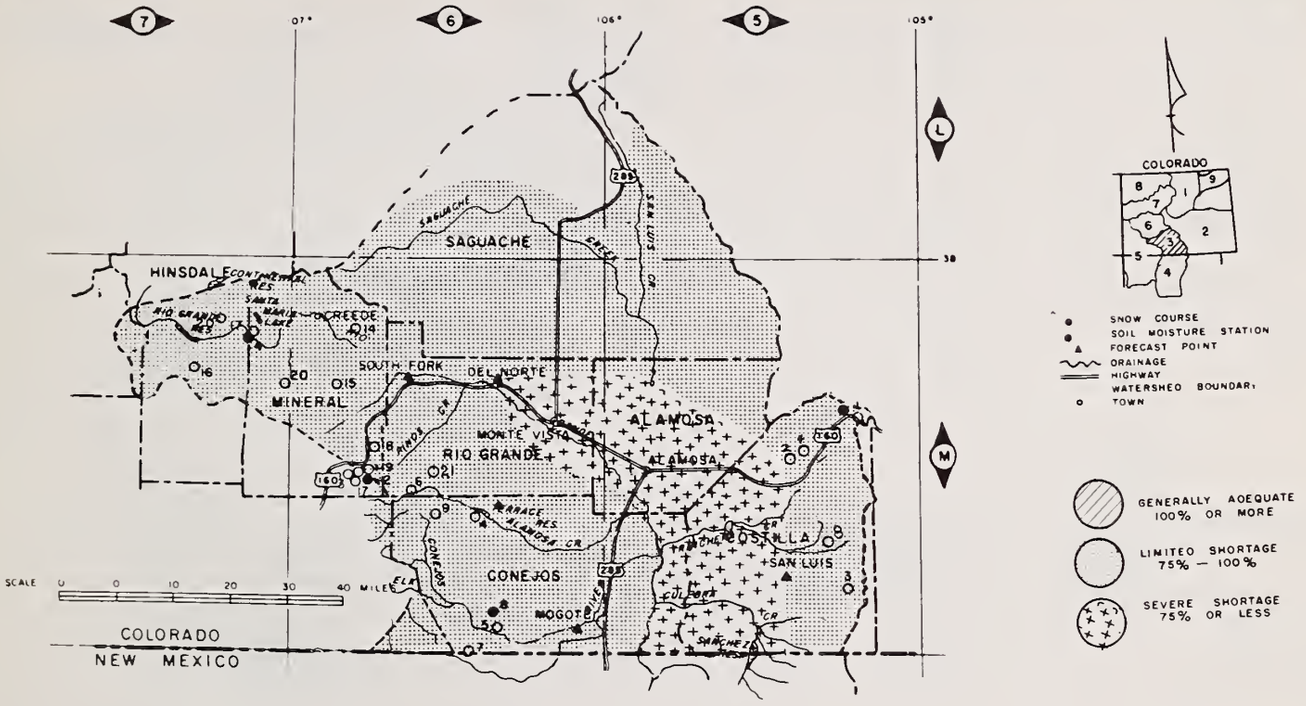
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE

UPPER RIO GRANDE WATERSHED IN COLORADO

as of

May 1, 1967

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



Streamflow will be less than normal and unless spring and summer rainfall is above normal, water shortages will exist. Flows should drop off rapidly and late season streamflow will be very low.

All the low to medium elevation snow pack is gone. The snow line now is about 10,000 feet. The snow pack above 10,000 feet is nearly normal. This high elevation snow pack will not provide adequate runoff this summer.

Practically all of the snow pack in the Sangre De Christo Range is gone and still streamflow remains near normal.

Carry-over storage in the major reservoirs in the basin contain 74% of normal storage.

Mountain soils are drier than normal despite the snow melt. This will tend to reduce runoff still further.

Forecasts are computed assuming normal precipitation for the remainder of the year.

The Rio Grande in Colorado should flow near 65% of the 1948-62 average. The Alamosa and South Fork should flow about 70%. Streams originating in the Sangre De Cristo Range will flow far below normal.

Water will have to be conserved to the utmost this summer.

Issued By: Soil Conservation Service

F. A. Mark, State Conservationist, Colorado

R. K. Griffin, Area Conservationist, Durango, Colorado

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

SNOW

Snow Course		CURRENT INFORMATION Date of Survey	Snow Depth (Inches)	Water Content (Inches)	PAST RECORD Water Content (Inches) Last Year	Avg. 48-62
Rio Grande in Colorado						
Cochetopa Pass		4/27	0	0	0	2.7*
Hiway		4/27	64	25.4	25.7	27.8*
Lake Humphreys		4/26	0	0	0.4	0.2*
Pass Creek		4/27	0	0	2.2	3.3*
Pool Table		4/26	0	0	1.8	1.9*
Porcupine		4/25	8	2.5	7.4	6.8*
Red Mountain Pass	(B)	4/25	61	25.0	25.5	31.4*
Santa Maria		4/28	0	0	0	0.5
Upper Rio Grande		4/27	0	0	1.8	2.3
Wolf Creek Pass		4/27	52	24.5	23.2	24.7
Wolf Creek Summit	(B)	4/27	73	29.3	32.2	30.2
Alamosa River						
Silver Lakes		4/27	0	0	0	0.5
Summitville		4/24	54	17.4	17.6	20.5
Conejos River						
Cumbres Pass		4/29	29	14.4	11.8	12.5
Platoro		4/27	30	11.5	9.2	10.9*
River Springs		4/27	0	0	- -	0.7
Sangre De Cristo Range						
Cucharas Pass	(B)	4/28	0	0	1.6	- -
Culebra		4/28	1	0.4	5.3	5.2
LaVeta Pass		4/28	0	0	0	1.7

SOIL MOISTURE

Station	Date of Survey	Capacity (Inches)	This Year	Last Year	Avg. All Data
Alberta Park	4/24	8.2	5.7	7.1	5.6
Bristol View	4/26	6.1	3.7	6.1	4.4
LaVeta Pass	4/28	11.9	11.7	11.9	11.8
Mogote	4/27	10.7	8.2	8.6	9.0

ALL PROFILES 4 FEET DEEP

RESERVOIR STORAGE (1,000 Acre-Feet)

Reservoir	Usable Capacity	This Year	Last Year	15 Year Average 1948-62
Continental	26.7	5.2	10.1	7.7
Platoro	60.0	3.0	17.3	- -
Rio Grande	45.8	10.3	39.8	14.8
Sanchez	103.2	9.9	15.1	12.3
Santa Maria	45.0	3.6	18.4	7.8
Terrace	17.7	5.9	10.8	4.8

MEASURED FIRST OF MONTH

STREAMFLOW FORECAST (1,000 Acre-Feet)

Stream and Station	Forecast Period April - Sept.	This Year % of Avg.	Avg. 1948-1962
Alamosa abv Terrace	48	71	68
Conejos nr Mogote	130	66	196
Culebra at San Luis (6)	8	38	21
Rio Grande at 30 Mile Bridge (5)	85	64	132
Rio Grande nr Del Norte (5)	275	56	492
South Fork at South Fork	80	66	122

(5) Observed flow plus change in storage in Santa Maria, Rio Grande and Continental Reservoir.
(6) Observed flow plus changes in storage in Sanchez Reservoir.

NOTE: * - 1948-62 (adjusted averages)
NS - NO SURVEY
(A) - AIR OBSERVED
(B) - ON ADJACENT DRAINAGE

This Report Prepared by Jack N. Washichek and Donald W. McAndrew, Soil Conservation Service, Colorado State University, Fort Collins, Colo.

WATERSHED IV

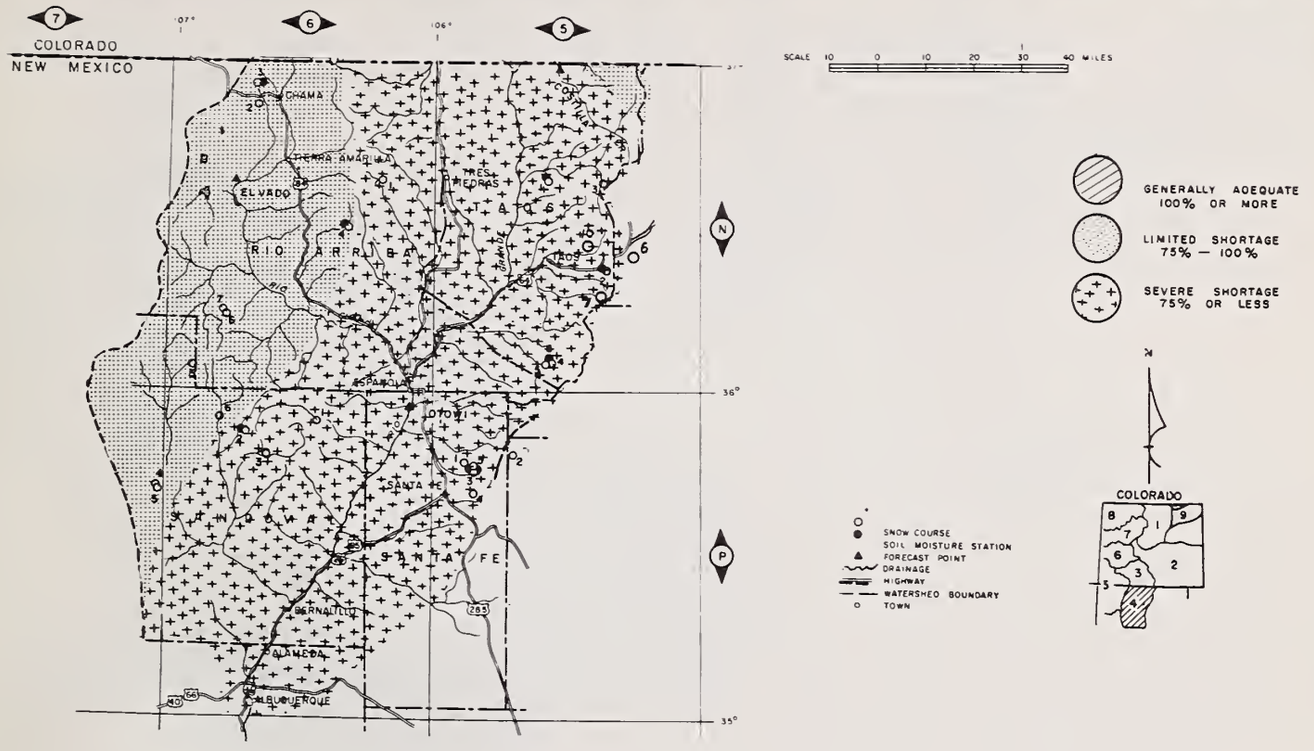
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE

RIO GRANDE WATERSHED IN NEW MEXICO

as of

May 1, 1967

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



April snowfall did not improve the water supply outlook in New Mexico. All but the extremely high snow pack is gone in New Mexico. The snow in the headwaters of the Rio Grande in Colorado is also melted below 10,000 feet. Although the extremely high elevation snow pack is good it will not hold up summer flows.

Carry-over storage in major reservoirs on the Rio Grande is 65% of normal, but will still be a good supplement.

Storage in Conchas is 164,500 acre-feet compared to a normal of 229,500 acre-feet.

The two reservoirs on the Pecos River, Alamorgordo and McMillan-Avalon, contain 74,300 acre-feet which is almost exactly normal for this date.

Mountain soils are wetter than normal, which may be caused by the early snow melt.

Valley soils in the upper basin contain only fair amounts of moisture, while all other areas of the State report dry soils.

Forecasts of summer streamflow are all less than half of normal.

Strict conservation measures will have to be employed by water users throughout the State this summer.

Issued By: Soil Conservation Service

Einar L. Roget, State Conservationist,
Albuquerque, New Mexico

Walter B. Rumsey, Area Conservationist,
Santa Fe, New Mexico

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

SNOW

Snow Course	CURRENT INFORMATION Date of Survey	Snow Depth (Inches)	Water Content (Inches)	PAST RECORD Water Content (Inches) Last Year	Avg. 48-62
Rio Grande (Colorado)					
Culebra	4/28	1	0.4	5.3	5.2
Cumbres Pass	4/29	29	14.4	11.8	12.5
LaVeta Pass	4/28	0	0.0	0	1.7
Platoro	4/27	30	11.5	9.2	10.9*
River Springs	4/27	0	0.0		0.7
Santa Maria	4/28	0	0.0	0	0.5
Silver Lakes	4/27	0	0.0	0	0.5
Summitville	4/24	54	17.4	17.6	20.5
Upper Rio Grande	4/27	0	0.0	1.8	2.3
Wolf Creek Pass	4/27	52	24.5	- -	- -
Big Tesuque (New Mexico)	4/27	0	0.0	- -	- -
Chamita	4/27	0	0.0		

SOIL MOISTURE

Station	Date of Survey	Capacity (Inches)	This Year	Last Year	Avg. All Data
Colorado					
Alberta Park	4/24	8.2	5.7	7.1	5.6
Bristol View	4/26	6.1	3.7	6.1	4.4
Mogote	4/27	10.7	8.2	8.6	9.0
New Mexico					
Aqua Piedra	3/29	7.2	5.1	5.3	3.7
Bateman	3/22	6.7	4.5	4.8	2.6
Big Tesuque	3/31	3.7	3.3	1.9	1.7
Chamita	3/30	8.0	8.0	8.0	3.7
Fenton Hill		6.5	- -	6.5	4.5
Red Summit	3/28	4.8	1.5	1.5	2.1
Rio En Medio	3/31	3.5	1.0	1.6	1.1
Taos Canyon	3/29	3.3	2.5	2.5	2.3

ALL PROFILES 4 FEET DEEP

RESERVOIR STORAGE (1,000 Acre-Feet)

Reservoir	Usable Capacity	This Year	Last Year	15 Year Average 1948-62
Alamorgordo	122.1	69.0	27.8	63.8
Caballo	344.0	94.3	103.4	102.1
Conchas	280.3	164.5	239.3	229.5
Elephant Butte	2206.8	222.8	479.4	354.0
El Vado	194.5	13.6	13.0	55.1
McMillan-Avalon	37.0	5.3	11.5	10.6
Red Bluff (Tex.)	307.0		52.7	59.1

MEASURED FIRST OF MONTH

STREAMFLOW FORECAST(1,000 Acre-Feet)

Stream and Station	Forecast as Indicated	This Year % of Avg.	Avg. 1948 - 62
Costilla at Costilla (8)	8 AS	32	25
Pecos at Pecos	20 AS	38	53
Rio Chama nr La Puenta	100 AS	47	214
Rio Grande at Otowi (7)*	250 MJ	41	609
Rio Grande at San Marcial (7)*	95 MJ	22	424
Rio Hondo nr Valdez	9 AS	50	18
Red River at Questa**	9 AJ	36	25

The Forecast of the Rio Grande at San Marcial is 14 % of the Average used by the Elephant Butte Irrigation District.

A-S is April through September.
A-J is April through July.
M-J is March through July.

(7) Observed flow plus changes in storage in El Vado and Abiquiu Reservoirs.
(8) Observed flow plus changes in storage in Costilla Reservoir.

NOTE: * - 1948-62 (adjusted averages)
NS - NO SURVEY
(A) - AIR OBSERVED
(B) - ON ADJACENT DRAINAGE

This Report Prepared by Jack N. Washichek and Donald W. McAndrew, Soil Conservation Service, Colorado State University, Fort Collins, Colo.

WATER SUPPLY OUTLOOK WATERSHED V

FOR THE SOIL CONSERVATION DISTRICTS IN THE

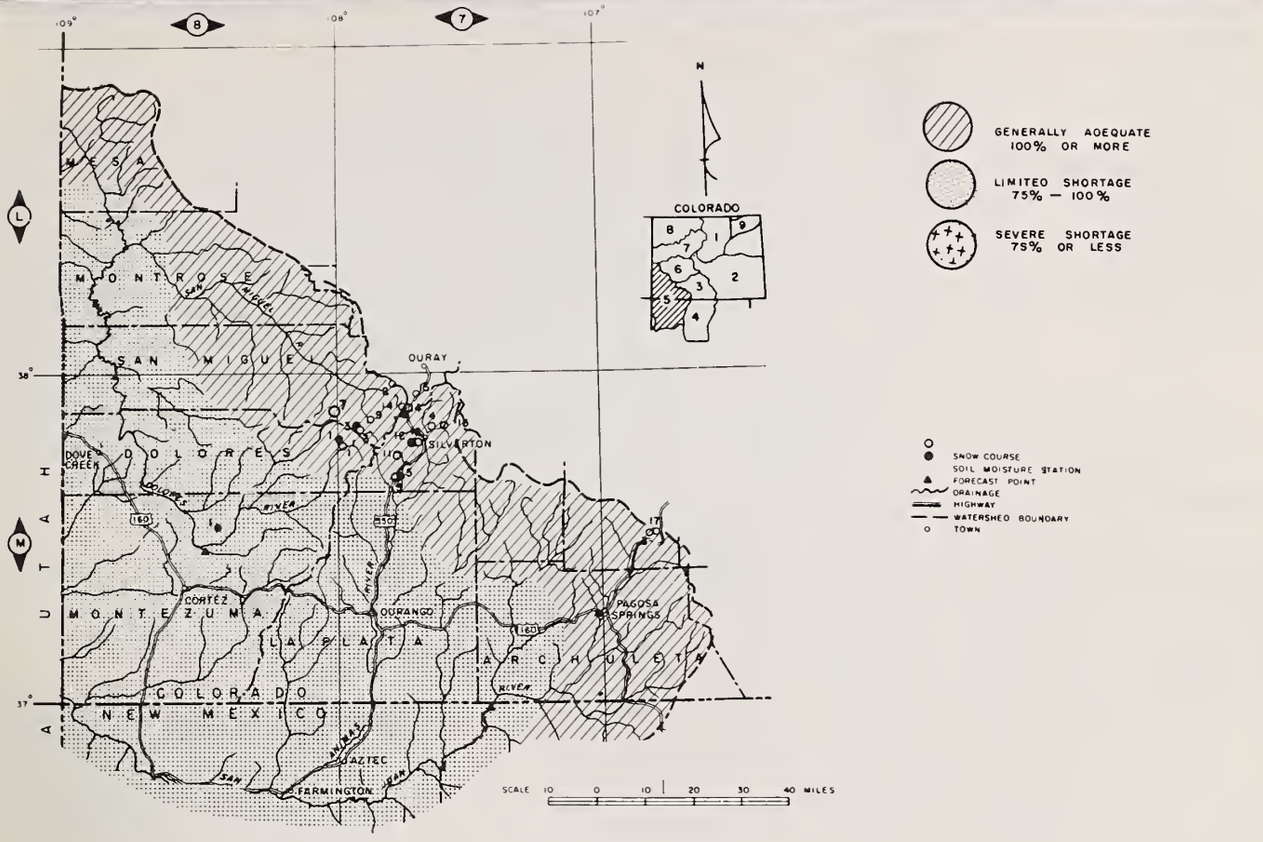
SAN MIGUEL - DOLORES - ANIMAS - SAN JUAN WATERSHEDS IN COLORADO AND NEW MEXICO

as of

May 1, 1967

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



High elevation snow pack remains good, but low snow has already melted. Snow pack on the San Juan stands at 87% of normal, however, this is not a true picture of conditions. Only high elevation snows are used in this average. The snow pack on the Animas River is 43% of normal and on the Dolores only 30%.

Low and medium elevation snow pack has already melted. Streamflow has not increased materially with all the low snows gone.

Carry-over reservoir storage is about normal in Groundhog and Vallecito Reservoirs, Navajo Reservoir contains 379,000 acre-feet as of May 1. This will be an excellent supplement for water users under that irrigation system.

Mountain soils contain slightly more moisture than usual. This may be caused by the early snow melt. Some shortages will exist in this area unless spring and summer rains are above normal. The San Juan, Animas, and Dolores Rivers are expected to flow only about 60% of normal. Piedra Creek and Los Pinos should flow slightly better, possibly as high as 70% of the 1948-62 average.

Forecasts are based on normal precipitation during the remainder of the forecast period.

The conservation of water is a must in this area this summer.

Issued By: Soil Conservation Service

F. A. Mark, State Conservationist, Colorado

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D. B. Beach, Area Conservationist, Grand Junction, Colorado

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

SNOW

Snow Course		CURRENT INFORMATION Date of Survey	Snow Depth (Inches)	Water Content (Inches)	PAST RECORD Water Content (Inches) Last Year	Avg. 48-62
San Juan River						
Chama Divide	(B)	4/28	0	0	0	- -
Chamita	(B)	4/28	0	0	0	- -
Upper San Juan		4/27	48	21.0	23.1	30.2
Wolf Creek Pass	(B)	4/27	52	24.5	23.2	24.7
Wolf Creek Summit		4/27	73	29.3	32.2	30.2
Animas River						
Cascade		4/28	0	0	2.8	3.0
Howardville		Destroyed			9.0	7.4*
Ironton Park	(B)	4/27	0	0	0	7.1
Mineral Creek		4/28	0	0	11.3	12.1*
Molas Lake		4/28	0	0	5.4	7.8*
Red Mountain Pass		4/28	61	25.0	25.5	31.4*
Silverton Sub-Station		4/28	0	0	0	0.1
Spud Mountain		4/28	36	14.6	18.2	23.8*
Dolores River						
Lizzard Head		4/28	15	6.3	13.2	13.7
Rico		4/28	0	0	0	1.0
Telluride		4/27	0	0	0	0.7
Trout Lake		4/27	3	1.3	3.6	9.9*

RESERVOIR STORAGE (1,000 Acre-Feet)

Reservoir	Usable Capacity	This Year	Last Year	15 Year Average 1948-62
Groundhog	21.7	10.3	21.7	8.6
Navajo	1036.0	379.0	255.5	- -
Vallecito	126.3	56.0	88.0	50.9

MEASURED FIRST OF MONTH

STREAMFLOW FORECAST (1,000 Acre-Feet)

Stream and Station	Forecast Period April - Sept.	This Year % of Avg.	Avg. 1948-1962
Animas at Durango	280	61	456
Dolores at Dolores	150	58	260
La Plata at Hesperus	17	63	27
Los Pinos at Bayfield (9)	155	70	220
Piedra Creek nr Piedra	120	66	182
San Juan at Rosa (9)	360	60	597

SOIL MOISTURE

Station	Date of Survey	Capacity (Inches)	This Year	Last Year	Avg. All Data
Cascade	4/28	9.1	8.6	9.1	6.8
Dolores	4/28	19.6	12.7	15.1	11.4
Lizzard Head	4/28	11.8	7.6	8.6	8.5
Mineral Creek	4/28	5.7	5.4	5.6	4.1
Molas Lake	4/28	9.4	6.4	9.4	5.8
Rico	4/28	13.8	9.7	13.8	9.0

ALL PROFILES 4 FEET DEEP

(9) Observed flow plus changes in storage in Vallicito Reservoir.

NOTE: * - 1948-62 (adjusted averages)
NS - NO SURVEY
(A) - AIR OBSERVED
(B) - ON ADJACENT DRAINAGE

This Report Prepared by Jack N. Washichek and Donald W. McAndrew, Soil Conservation Service, Colorado State University, Fort Collins, Colo.

WATERSHED VI

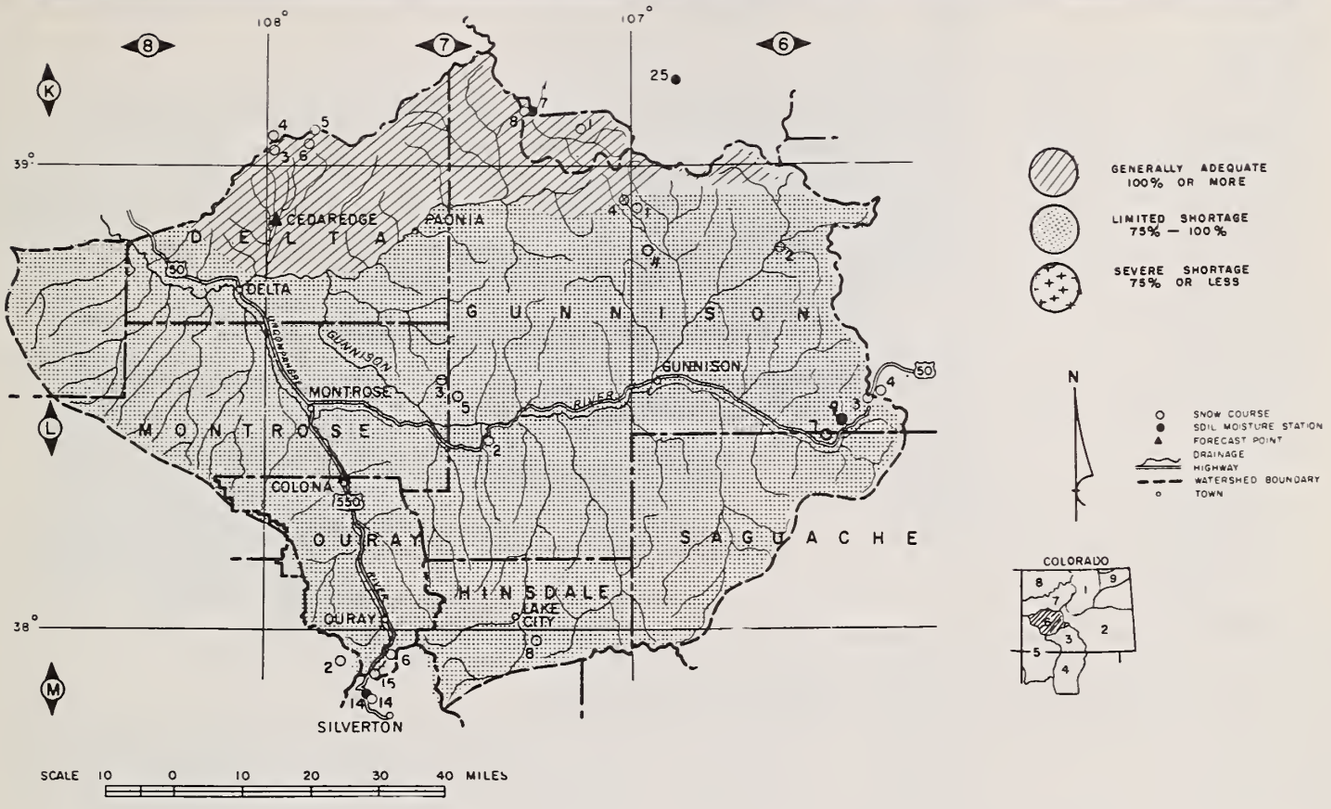
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE

GUNNISON RIVER WATERSHED IN COLORADO

as of

May 1, 1967

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



Again this month the snow pack decreased throughout the headwaters of the Gunnison River. Snow courses in the Lake City, Monarch Pass, and Taylor Park areas are currently about 50% of normal. In this area there has been less snow than now, once in recent history. That year was 1954.

The Grand Mesa area still remains one of the best spots in the State. Here the snow pack is 108% of average. This will help the water users on the streams originating in that area.

Snow pack on the Uncompahgre Drainage is similar to the Gunnison at 56% of the 1948-62 average.

Mountain soil moisture is better than average for the entire area covered by this report.

The streamflow forecasts issued in this report are revised downward from those issued last month. This is due primarily to the lack of snowfall during April. The Gunnison River is now expected to flow 750,000 acre-feet which is 57% of average. The Uncompahgre River is forecast at 68% of normal for the coming season. Streamflow on the North Fork of the Gunnison should be slightly better and near 75%.

Issued By: Soil Conservation Service

F. A. Mark, State Conservationist,
Colorado

Dearl Beach, Area Conservationist,
Grand Junction, Colorado

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

SNOW

Snow Course		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches) Last Year	Water Content (Inches) Avg. 48-62
Gunnison River						
Alexander Lakes		4/28	62	24.4	15.7	23.0
Black Mesa		NS			- -	- -
Blue Mesa		4/27	0	0.0	0	2.3*
Butte		4/27	0	0.0	0	- -
Cochetopa Pass		4/27	0	0.0	0	2.7*
Crested Butte		4/27	0	0.0	0	7.5
Keystone		4/27	29	12.9	8.7	- -
Lake City		4/26	0	0.0	0	3.5
Long Gulch		NS				- -
Mesa Lakes	(B)	4/27	36	13.7	9.6	15.9
Monarch Pass	(B)	4/28	14	6.8	9.3	18.4
McClure Pass		4/24	20	7.4	2.2	10.1*
Mineral Creek	(B)	4/28	0	0.0	11.3	12.1*
North Lost Trail	(B)	4/24	10	3.4	1.0	
Park Cone		4/27	11	4.2	5.2	8.7
Park Reservoir		4/28	67	27.5	21.4	25.5
Porphyry Creek		4/28	22	9.9	10.9	17.7
Tomichi		4/28	6	2.2	5.5	- -
Trickle Divide	(B)	4/28	68	27.7	23.8	28.8
Uncompahgre River						
Ironton Park		4/27	0	0.0	0	7.1
Lizzard Head		4/28	15	6.3	13.2	13.7
Lone Cone		4/27	6	2.6	4.7	- -
Red Mountain Pass	(B)	4/28	61	25.0	25.5	31.4
Telluride		4/27	0	0.0	0	0.7
Trout Lake		4/27	3	1.3	3.6	9.9*

CURRENT INFORMATION — PAST RECORD

RESERVOIR STORAGE (1,000 Acre-Feet)

Reservoir	Usable Capacity	This Year	Last Year	15 Year Average 1948-62
Taylor	106.2	51.8	88.7	60.3

MEASURED FIRST OF MONTH

STREAMFLOW FORECAST (1,000 Acre-Feet)

Stream and Station	Forecast Period April - Sept.	This Year % of Avg.	Avg. 1948-1962
Gunnison nr Grand Jct.	750	57	1305
Surface Creek nr Cedaridge	15	88	17
Uncompahgre at Colona	95	68	139

NOTE: * - 1948-62 (adjusted averages)
NS - NO SURVEY
(A) - AIR OBSERVED
(B) - ON ADJACENT DRAINAGE

SOIL MOISTURE

Station	Date of Survey	Capacity (Inches)	This Year	Last Year	Avg. All Data
Grand Mesa	4/28	12.5	9.0	12.5	- -
King	4/28	3.3	3.0	3.0	2.1
Mineral Creek	4/28	5.7	5.4	5.6	4.1
Placita	4/28	9.3	7.8	7.5	8.1

ALL PROFILES 4 FEET DEEP

This Report Prepared by Jack N. Washichek and Donald W. McAndrew, Soil Conservation Service, Colorado State University, Fort Collins, Colo.

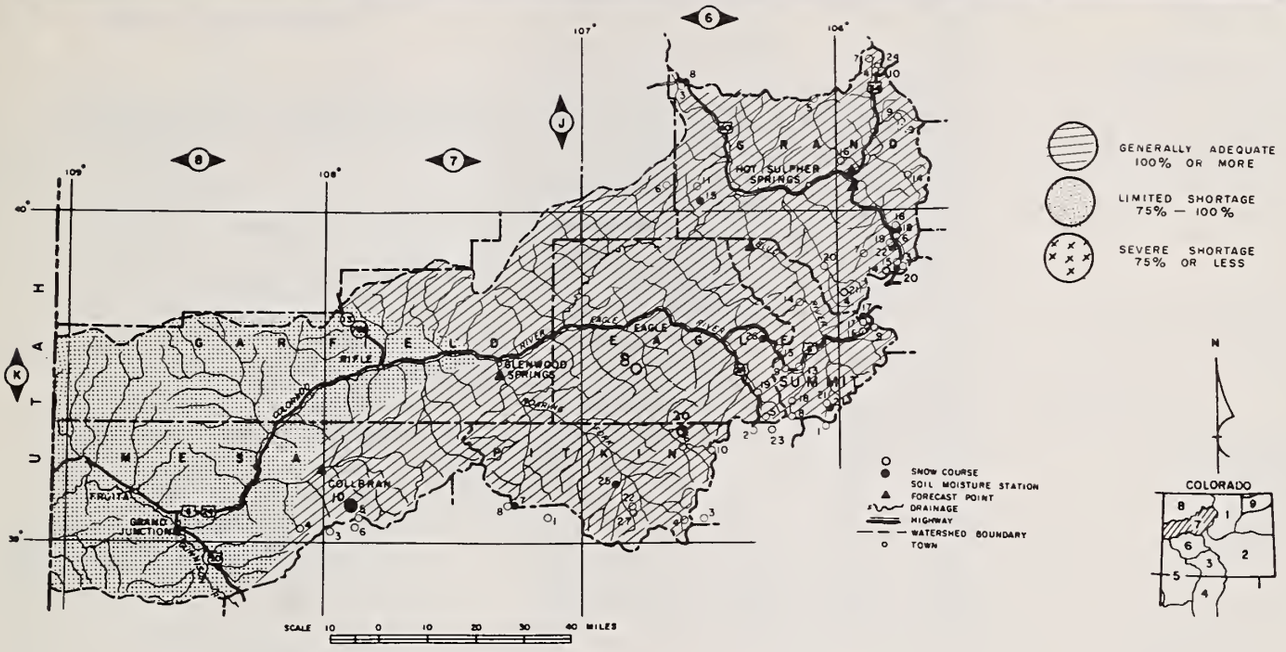
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE

COLORADO RIVER WATERSHED IN COLORADO

as of

May 1, 1967

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



Water users on the Colorado River mainstem should have adequate water this summer. Mountain snow pack now stands at 85% of the 15 year normal. Some of the high elevation snow courses are above normal, due primarily to the late April storms. Two storms dropped as much as three inches of water in some locations. Some melting occurred during the month especially at the lower elevations, however, streamflow has not raised materially. Cool weather could delay runoff for some time.

Mountains soils as of May first contained nearly normal amounts of moisture. Valley soils in the upper basin are in good condition, while the lower areas are reporting only fair soil moisture.

Forecasts on the Colorado mainstem range from 85% of normal at Glenwood to 103% at Granby. This should be adequate for most water users.

The Roaring Fork and Williams Fork Rivers should flow about 85% of the forecast period.

If spring temperatures remain below normal, runoff will be delayed and flows will be less than expected.

Issued By: Soil Conservation Service

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"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

SNOW

Snow Course	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches) Last Year	Water Content (Inches) Avg. 48-62
Colorado River					
Arrow	4/26	27	10.9	5.3	9.1
Berthoud Pass	4/25	43	16.2	8.4	15.7
Berthoud Summit	4/27	55	18.1	13.5	21.6
Blue River	4/26	4	1.1	0	8.0*
Cooper Hill	4/26	43	12.6	6.8	- -
Fiddlers Gulch	4/28	35	11.9	7.4	17.0
Fremont Pass	4/26	57	19.5	10.3	19.5
Frisco	4/27	3	1.2	1.2	5.6*
Glen Mar Ranch	4/24	1	0.4	0.5	4.8
Gore Pass	4/25	16	5.7	1.3	7.9*
Granby	4/24	10	3.7	2.3	3.3*
Grand Lake	4/26	14	4.8	0.5	3.7*
Grizzly Peak	4/27	49	18.4	10.7	21.1
Hoosier Pass (B)	4/26	33	11.6	6.0	12.9
Jones Pass	4/25	38	15.0	9.1	16.9*
Lake Irene	4/26	61	21.8	12.0	24.7
Lapland	4/26	17	6.7	0.2	9.3
Lulu	4/28	54	19.2	10.5	19.8
Lynx Pass	4/25	22	7.4	1.6	7.8
McKinzie Gulch	4/26	0	0.0	0	- -
Middle Fork Campground	4/24	9	3.1	4.2	6.4
Milner	4/26	38	15.1	7.4	12.1*
Monarch Lake	Destroyed			1.3	6.4
North Inlet to Grand Lake	4/26	18	6.5	2.5	6.7
Pando	4/26	14	6.3	3.4	8.3
Phantom Valley	4/26	20	8.4	0.5	7.0
Ranch Creek	4/26	28	9.4	4.2	9.6*
Shrine Pass	4/27	48	18.9	9.6	20.2
Snake River	4/28	0	0.0	0	5.1*
Summit Ranch	4/25	6	2.2	1.6	6.1*
Tennessee Pass	4/28	8	2.7	5.0	8.5
Vail Pass	4/27	32	14.2	6.6	16.3*
Vasquez Creek	4/26	39	12.9	8.0	14.0
Willow Creek Pass	4/25	35	13.5	6.5	12.0
Roaring Fork River					
Aspen	4/28	45	16.1	12.0	- -
Independence Pass Tunnel	4/27	38	17.0	10.1	17.6
Ivanhoe	4/27	46	18.5		19.2
Lift	4/28	53	18.2	11.4	17.8*
McClure Pass	4/24	20	7.4	2.2	10.1*
Nast	4/28	0	0.0	0	1.7
North Lost Trail	4/24	10	3.4	1.0	8.0
Plateau Creek					
Alexander Lake (B)	4/28	62	24.4	15.7	23.0
Mesa Lakes	4/27	36	13.7	9.6	15.9
Park Reservoir (B)	4/28	67	27.5	21.4	25.5
Trickle Divide	4/28	68	27.7	23.8	28.8

SOIL MOISTURE

Station	Date of Survey	Capacity (Inches)	This Year	Last Year	Avg. All Data
Berthoud Pass	4/25	3.9	3.2	3.5	2.8
Blue River	4/26	4.2	2.8	4.2	2.7
Gore	4/25	4.9	4.9	4.5	4.4
Grand Mesa	4/28	12.5	9.0	12.5	- -
Muddy Pass	4/28	11.1	9.3	11.1	8.5
Placita	4/28	9.3	7.8	7.5	8.1
Ranch Creek	4/26	8.7	4.9	5.9	6.5
Vail	4/27	12.3	9.0	9.1	11.0
Vasquez Siphon	4/26	11.0	9.4	8.6	9.2

ALL PROFILES 4 FEET DEEP

RESERVOIR STORAGE (1,000 Acre-Feet)

Reservoir	Usable Capacity	This Year	Last Year	15 Year Average 1948-62
Granby	465.5	55.3	219.6	85.0
Green Mountain	146.9	39.0	63.4	46.9
Vega	32.9	8.1	26.0	- -
Williams Fork	96.8	5.9	17.9	- -

MEASURED FIRST OF MONTH

STREAMFLOW FORECAST (1,000 Acre-Feet)

Stream and Station	Forecast Period April - Sept.	This Year % of Avg.	Avg. 1948-1962
Blue River abov. Green Mt. (10)	220	80	274
Colo. River nr Granby (11)	240	103	233
Colo. River abv Glenwood Springs (12)	1325	85	1556
Roaring Fork at Glenwood Springs (14)	625	82	762
Williams Fork nr Parshall (15)	65	84	77
Willow abv Willow Cr.	45	94	48
Colo. nr Cameo (12)	1950	88	2213

(10) Observed flow plus change in storage in Dillon Reservoir.
(11) Observed flow diversions by Adams Tunnel and Grand River Ditch plus change in storage in Granby Reservoir.
(12) Observed flow plus the changes as indicated in (11) plus Moffat Ditch.
(14) Observed flow plus diversion through Twin Lakes Tunnel.
(15) Observed flow plus diversions through Jones Pass Tunnel.

NOTE: * - 1948-62 (adjusted averages)
NS - NO SURVEY
(A) - AIR OBSERVED
(B) - ON ADJACENT DRAINAGE

This Report Prepared by Jack N. Washichek and Donald W. McAndrew, Soil Conservation Service, Soil Conservation Service, Fort Collins, Colo.

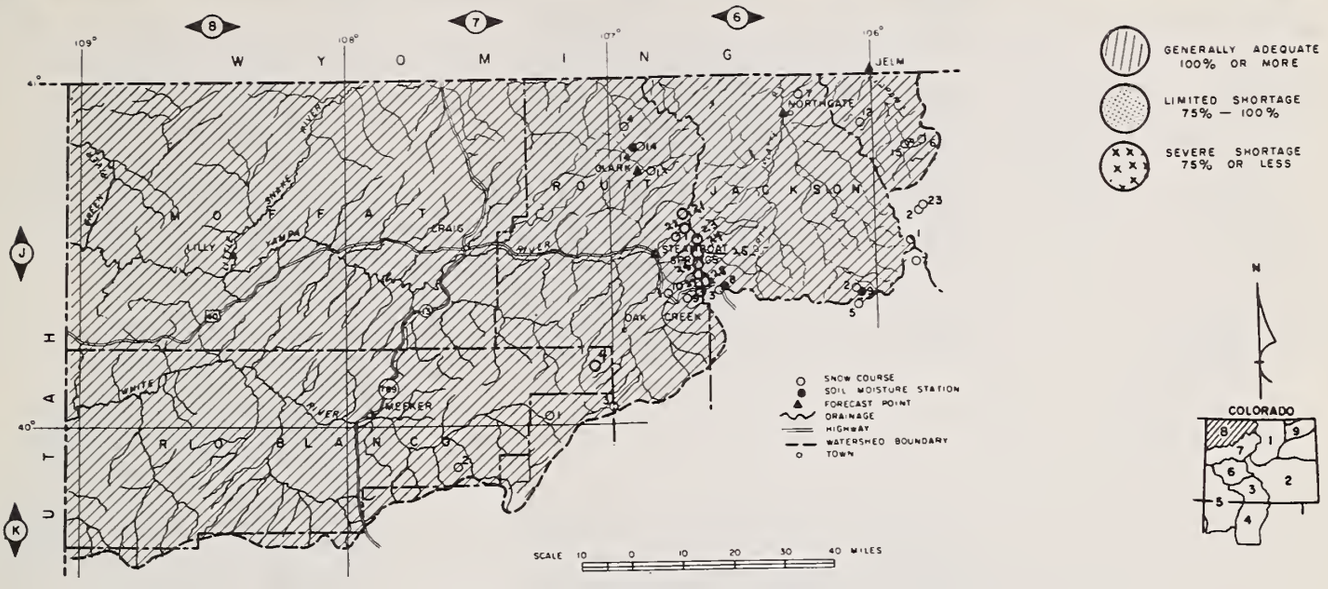
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE

YAMPA, WHITE, AND NORTH PLATTE RIVERS WATERSHEDS IN COLORADO

as of

May 1, 1967

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



Water supplies in this area should be adequate this summer. The snow pack on the North Platte, is the best in the state and is 97% of normal.

The Yampa snow pack is only 77% and the White 62%, however, no appreciable water shortage is expected. Snow was still falling over most of this area as of May 1st, so some small increase of the snow pack is expected.

Low elevation snow has started to melt, but the river's flow has not increased yet.

Mountain soils contain about normal moisture, but not as much as last year at this time.

Forecasts assume normal precipitation for the remainder of the season. If this occurs the North Platte should flow 105% of normal, the Yampa and White Rivers about 73%.

The Little Snake should flow just about average.

Issued By: Soil Conservation Service

F. A. Mark, State Conservationist,
Colorado

R. L. Porter, Area Conservationist,
Glenwood Springs, Colorado

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

SNOW — CURRENT INFORMATION — PAST RECORD

Snow Course		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches) Last Year	Water Content (Inches) Avg. 48-62
North Platte River						
Cameron Pass		4/26	82	33.9	21.9	28.1
Columbine Lodge		4/28	40	18.4	9.6	22.9
Deadman Hill	(B)	4/27	48	17.1	13.0	18.1
McIntyre	(B)	4/22	24	9.9	5.8	10.2*
Northgate		4/25	8	1.9	0.4	3.0*
Park View		4/25	19	7.1	3.0	6.8
Roach		4/22	51	16.8	16.4	21.0
Willow Creek Pass	(B)	4/25	35	13.5	6.5	12.0
Yampa River						
Bear River		4/29	16	6.0	1.1	8.3*
Clark		4/28	7	2.8	0	- -
Columbine Lodge	(B)	4/28	40	18.4	9.6	22.9
Dry Lake		4/27	38	14.2	6.8	17.2
Elk River		4/28	38	16.3	9.3	13.4
Hahn's Peak		4/28	19	8.3	1.7	- -
Lynx Pass		4/25	22	7.4	1.6	7.8
Rabbit Ears		4/28	47	19.9	16.1	27.9
Yampa View		4/27	0	0.0	1.3	9.7*
White River						
Burro Mountain		4/25	34	11.1	4.3	15.8
Rio Blanco		4/29	13	5.1	0	10.5

STREAMFLOW FORECAST (1,000 Acre-Feet)

Stream and Station	Forecast Period April - Sept.	This Year % of Avg.	Avg. 1948-1962
Elk at Clark	190	93	205
Laramie at Jelm	121	108	112
Little Snake at Lilly	321	100	321
North Platte at Northgate	272	105	260
White at Meeker	250	75	332
Yampa at Maybell	830	90	923
Yampa at Steamboat Spr.	225	77	292

SOIL MOISTURE

Station	Date of Survey	Capacity (Inches)	This Year	Last Year	Avg. All Data
Hahn's Peak	4/28	19.0	13.3	11.2	- -
Laramie Road	4/30	12.4	8.1	9.1	9.0
Muddy Pass	4/28	11.1	9.3	11.1	8.5
Two Mile	4/27	9.1	4.3	5.5	5.6
Willow Pass	4/25	9.5	6.5	9.5	6.9

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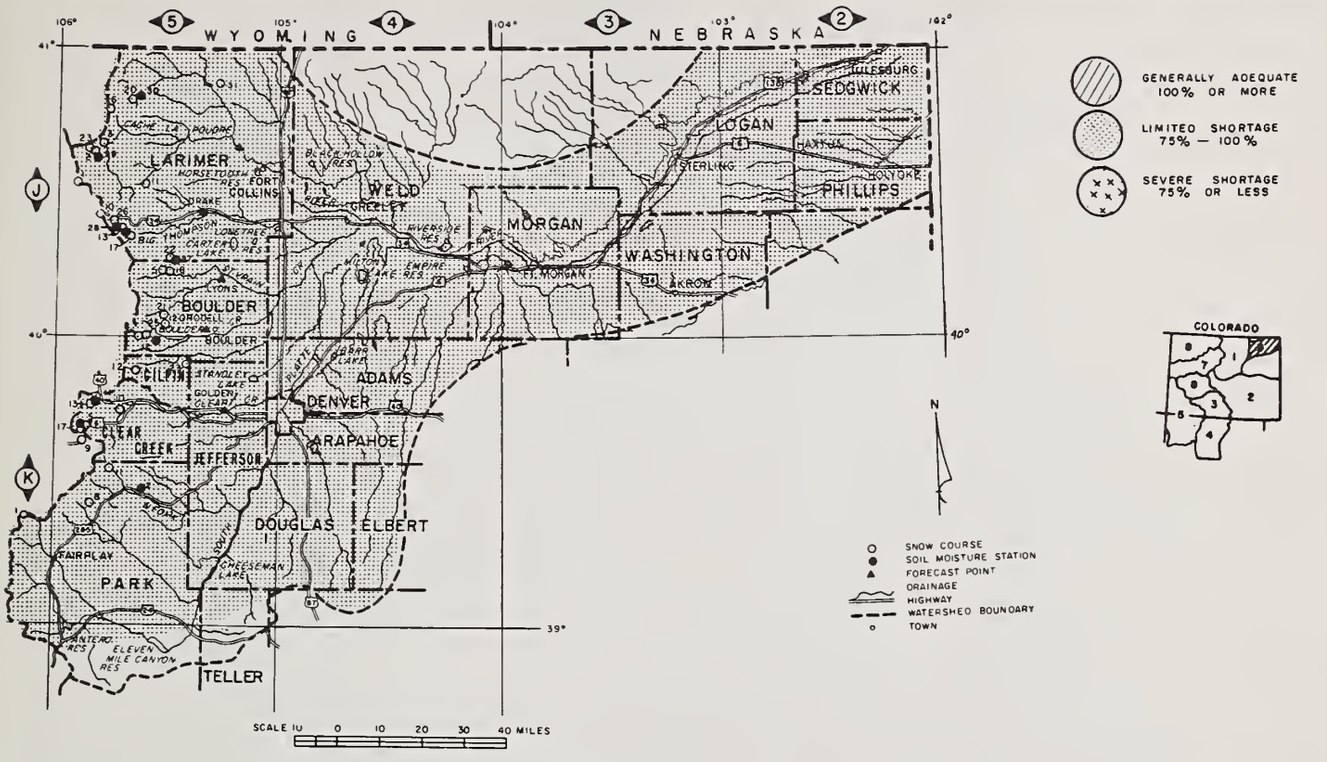
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE

LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of

May 1, 1967

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



The snow pack in the mountain watersheds of the South Platte River and its tributaries remains below normal. Even with the big storm of April 13th, the snow pack remains at only 67% of average over the entire basin. There are a few isolated areas in the basin that have a near normal snow pack. These are mostly in the very high elevations.

The water held in the reservoirs throughout the basin remains similar to last month at 107% of average. This water will be an excellent supplement this summer. Following the good rains in the area during this last month most of the irrigated areas are reporting good soil moisture conditions. This situation will help the below normal streamflow as it will lessen the demands on the early flows.

Mountain soil moisture is slightly below normal for this time of year. Some of the snow water will be used to wet up the soil mantle before the spring runoff starts.

Streamflow forecasts range from a high of 90% of average on Clear Creek to a low of 73% on the Cache La Poudre. The Big Thompson, Boulder Creek and Saint Vrain Rivers will flow between 77 to 85% this year. The mainstem of the South Platte will probably flow less than 70% this summer.

Issued By: Soil Conservation Service

F. A. Mark, State Conservationist, Colorado

J. L. Hall, Area Conservationist, Sterling, Colorado

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

SNOW

Snow Course	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches) Last Year	Water Content (Inches) Avg. 48-62
South Platte River & Tributaries					
Baltimore	4/27	0	0	0	- -
Berthoud Falls	4/27	19	7.2	8.4	13.8*
Big South	4/29	3	0.4	0	0.8
Boulder Falls	4/29	22	9.2	5.0	13.2*
Cameron Pass	4/26	82	33.9	21.9	28.1
Chambers Lake	4/30	14	6.1	0	5.5
Como	4/26	6	2.1	- -	- -
Copeland Lake	4/28	0	0.0	0	2.3*
Deadman Hill	4/27	48	17.1	13.0	18.1
Deer Ridge	4/27	1	0.5	0	3.5*
Empire	4/27	22	8.4	4.2	7.1*
Geneva Park	4/26	5	2.1	0.5	1.9*
Grizzly Peak (B)	4/27	49	18.4	10.7	21.1
Hidden Valley	4/27	29	10.6	6.9	13.6
Hoosier Pass	4/26	33	11.6	6.0	12.9
Horseshoe	4/26	18	6.0		- -
Hour Glass Lake	4/27	12	4.1	1.4	7.5
Jefferson Creek	4/27	17	5.8	1.9	8.0*
Lake Irene (B)	4/26	61	21.8	12.0	24.7
Long's Peak	4/29	33	12.1	6.5	13.4*
Lost Lake	4/30	32	7.7	1.9	10.2*
Loveland Lift No. 1	4/28	76	27.5	15.1	- -
Loveland Pass	4/28	33	13.7	4.9	16.4
Mosquito	4/26	3	1.1		- -
Pine Creek	4/27	0	0.0	0	- -
Red Feather				0.7	4.9*
Two Mile	4/27	53	17.3	9.8	17.8*
Trout Creek	4/28	0	0.0		- -
University Camp	4/29	35	14.1	8.2	24.9
Ward	4/27	11	4.1	0.4	6.0*
Wild Basin	4/27	24	7.6	5.1	14.8

RESERVOIR STORAGE (1,000 Acre-Feet)

Reservoir	Usable Capacity	This Year	Last Year	15 Year Average 1948-62
Carter	108.9	95.7	107.3	79.0
Cheeseman	79.0	31.8	77.2	54.3
Eleven Mile	81.9	90.9	92.3	74.6
Empire	37.7	28.3	34.1	29.6
Horsetooth	143.5	116.8	120.3	85.6
Jackson	35.4	33.8	34.9	34.2
Julesburge	28.2	21.7	23.2	22.0
Point of Rocks	70.0	65.4	72.0	61.6
Prewitt	32.8	6.3	30.2	21.7
Riverside	57.5	55.7	56.1	51.0

MEASURED FIRST OF MONTH

STREAMFLOW FORECAST (1,000 Acre-Feet)

Stream and Station	Forecast Period April - Sept.	This Year % of Avg.	Avg. 1948-1962
Big Thompson at Drake (2)	85	77	110
Boulder at Orodell	46	85	54
Cache La Poudre at Canon Mouth (1)	180	73	246
Clear Creek at Golden (3)	120	90	134
Saint Vrain at Lyons	65	81	80

SOIL MOISTURE

Station	Date of Survey	Capacity (Inches)	This Year	Last Year	Avg. All Data
Alpine Camp	4/27	6.9	3.5	4.1	4.3
Beaver Dam	4/27	7.3	4.8	5.2	4.7
Clear Creek	4/28	9.5	5.8	6.4	5.9
Feather	4/28	10.1	6.5	9.4	8.1
Guard Station	4/29	6.9	4.9	4.6	4.7
Hoop Creek	4/26	4.9	3.5	3.5	2.9
Hoosier Pass	4/26	7.8	4.8	6.3	5.9
Kenosha Pass	4/27	4.4	4.0	3.3	3.7
Laramie Road	4/30	12.4	8.1	9.1	9.0
Two Mile	4/27	9.1	4.3	5.5	5.6

ALL PROFILES 4 FEET DEEP

(1) Observed flow minus diversions from Michigan, Colorado and Laramie Rivers, plus diversions for irrigation and municipal use above station.
(2) Observed flow plus by-pass to power plants.
(3) Observed flow minus diversions through Jones Pass.

NOTE: * - 1948-62 (adjusted averages)
NS - NO SURVEY
(A) - AIR OBSERVED
(B) - ON ADJACENT DRAINAGE

This Report Prepared by Jack N. Washichek and Donald W. McAndrew, Soil Conservation Service, Colorado State University, Fort Collins, Colo.

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

Colorado State Engineer
New Mexico State Engineer
Nebraska State Engineer
Colorado Experiment Station
Rocky Mountain Forest and Range Experiment Station

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Department of Agriculture

- Forest Service
- Soil Conservation Service

Department of Interior

- Bureau of Reclamation
- Geological Survey
- National Park Service
- Indian Service

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- Weather Bureau

War Department

- Army Engineer Corps

Atomic Energy Commission

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MUNICIPALITIES

City of Denver
City of Boulder
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Arkansas Valley Ditch Association
Colorado River Water Conservation District

IRRIGATION PROJECTS

Farmers Reservoir and Irrigation Company
San Luis Valley Irrigation District
Santa Maria Reservoir Company
Costilla Land Company
Uncompahgre Valley Water Users' Association
Twin Lakes Reservoir and Canal Company
Trinchera Irrigation Co.

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